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IMAGE NEUROGRAPHY AND DIFFUSION ANISOTROPY IMAGING

Abstract of the Disclosure

A neurography system (10) is disclosed for generating diagnostically useful
5 images of neural tissue (i.e., neurograms) employing a modified magnetic resonance
imaging system (14). In one embodiment, the neurography system selectively images
neural tissue by employing one or more gradients to discriminate diffusion anisotropy
in the tissue and further enhances the image by suppressing the contribution of fat to
the image. The neurography system is part of a broader medical system (12), which
10 may include an auxiliary data collection system (22), diagnostic system (24),
therapeutic system (26), surgical system (28), and training system (30). These various
systems are all constructed to take advantage of the information provided by the
neurography system regarding neural networks, which information was heretofore
unavailable.

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